NAME:-

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SUBJECT:- C++

EXAM: SUMMER - FINAL

QUESTION- 1-a.

PROGRAM FOR GRADING SYSTEM.

```
#include <iostream>
using name space std;
int main()
{ int marks;
cout << "--- Program To Find Grad ---
 - " << endl;
 cout << "\n Enter Marks ";
 cin >> marks;

if marks >= 88 && mark <= 100)
cout << " your Grad is A.";
else if (marks >= 81 && marks <88)
 cout << "your grade is B+.";
 else if(mark >= 74 && marks <81)
  cout << " your Grad is B.";
  else if (mars >= 67 && mark < 74)
  cout << " your Grad is C+.";
  else if (marks >= 60 && mark <67)
  cout << " your Grad is C.";
  else if(marks >= 50 && mark <60)
  cout << " your Grad is D.";
  else if (marks >=0 && mark <50)
  cout << " your Grade is F.";
  else cout << " invalid Marks."; return 0; }
```

QUESTION- 1-"b"

IF STATEMENT:-

If statement is the most simple decision making statement. It is used to decide weather a certain statement of block of statement will be executed or not i.e if a certain condition is true then a block of statement is exwted otherwise not.

Syntax

```
if ( condition
{
 // statement to excute if
 // condition is true
}
```

IF ELSE STATEMENT:-

The if statement alone tells us that if a condition is true it will execute a block of statement and if the condition is false it won't. but what if we want to do something else if the condition is false Here comes the C else statement. We can use the else statement with if statement to execute a block of code when the condition is false.

Syntax

```
if (condition
{
 // Executes this block if
// condition is true
}
else
{
// Executes this block if
// condition is false
}
```

QUESTION- 2-a

```
include < iostream >
using namespace std;

int main( void
{
char Selection;

cout << "\n Menu ";
Cout << "\n A- Append";
cout << "\n M- modify ";
cout << "\n D- Delete ";
cout << "\n X- Exit ";
Cout << "\n Enter Selection. ";
// read the input
Cin >> Selection;
Switch ( Selection)
{
```

```
case 'A':
case"a' : { cout<<"\n To appen a record\n"; }
 break;
 case 'M':
 case 'm': { cout<<"\n To modify a record"; }
 break;
 case 'D':
case'd' : { cout <<" \n To delete a record"; }
break;
case 'x'
case 'x': { cout<<"\n To exit the meno" : }
break;
// other than A, M, D, and x
default: cout <<" \n invalid Selection ";
// no break in the default case
}
cout <<" \n";

return 0;
}
```

QUESTION- 2-"b"

DIFFERENTIATE BETWEEN.

Nested if Else Statement	Switch Statement
→ It becomes complicated for multiple selection	→ It is easy to understand for multiple selection
→ If uses an independent Expression for each case	→ It uses a singal expression for all cases but each case must have a constant value of integers or character type.
→ The test condition can be given in a special range of value if the given condition matches then the statement under it will be exected.	→ only a single expression is given in the switch statement which returns a single value. The test condition can not be given in a specific range it is draw back.

→ It is difficult to edit the if else statement if nested if else statement is used	→ It is easy to edit switch case as they are recognized easily

QUISTION- 3-"a"

RATIONAL OPERATOR:.

A rational operator compare two values.

Values can be any built in C++ data type

The comparision involves such relashim ship as equal to less than or greater than

The result of comparisim is either true or false.

RATIONAL EXPRESSION:

Evaluate to have integer value 1 (true) or (0) false.

All of these operators are called binary operators because they take two Expressions as operands.

Rational operator (==) is used to compare 2 value weather are equal or not.

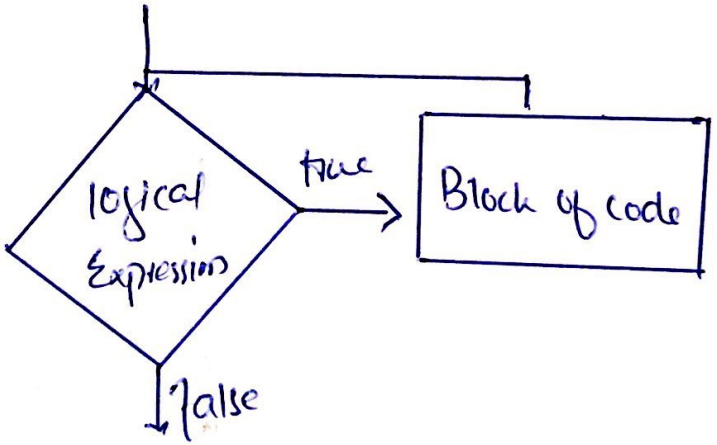
If both values are equal, out put displayed as "value are equal" Else out put is displayed as "value are not equal"

(10)

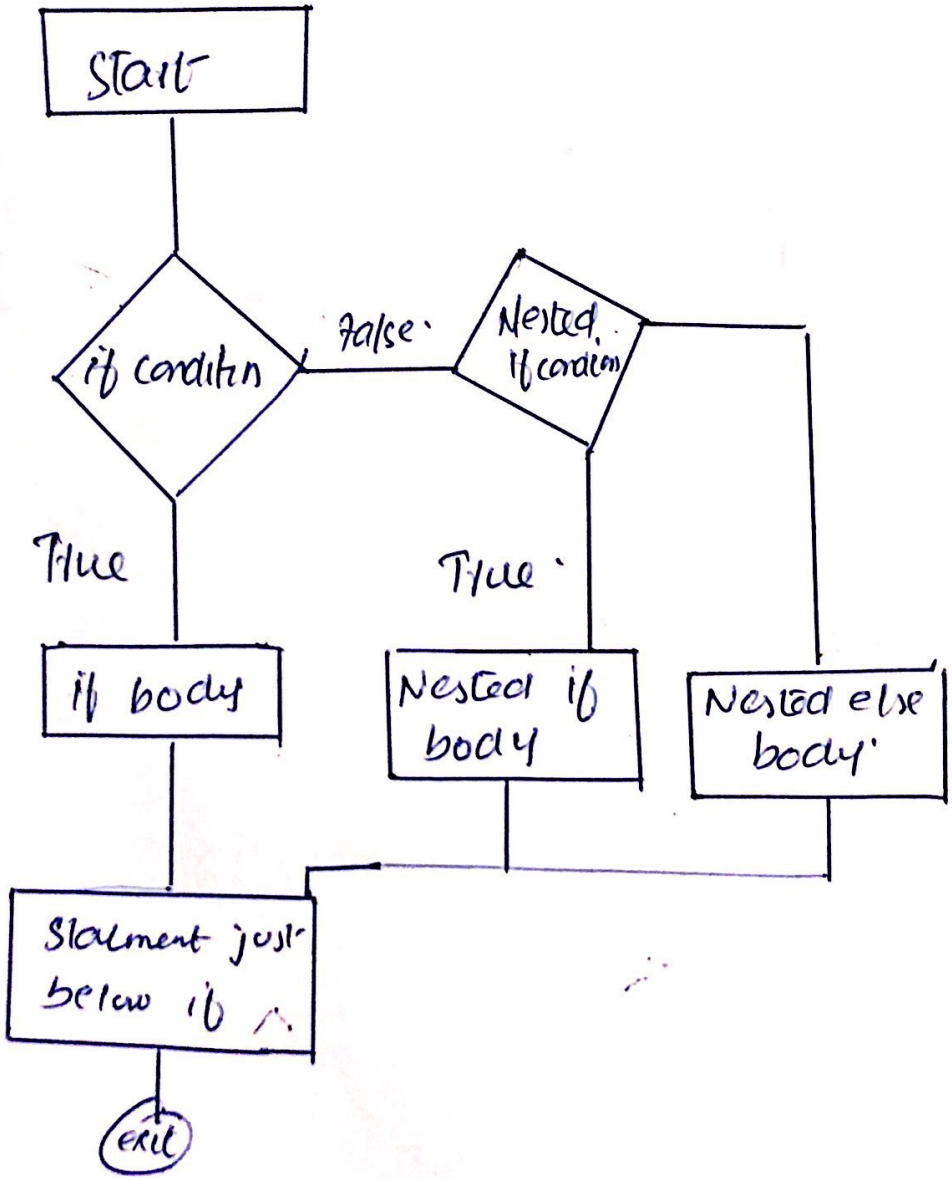
QUISTION- 3- b

FLON CHARTS.

WHILE LOOP.



If Nestested Statement:



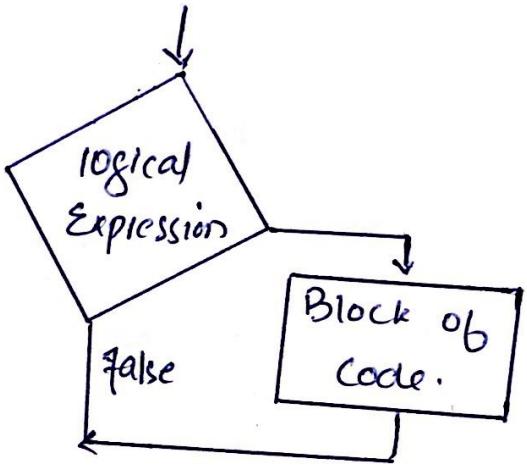
QUESTION - 4. a.

(12)

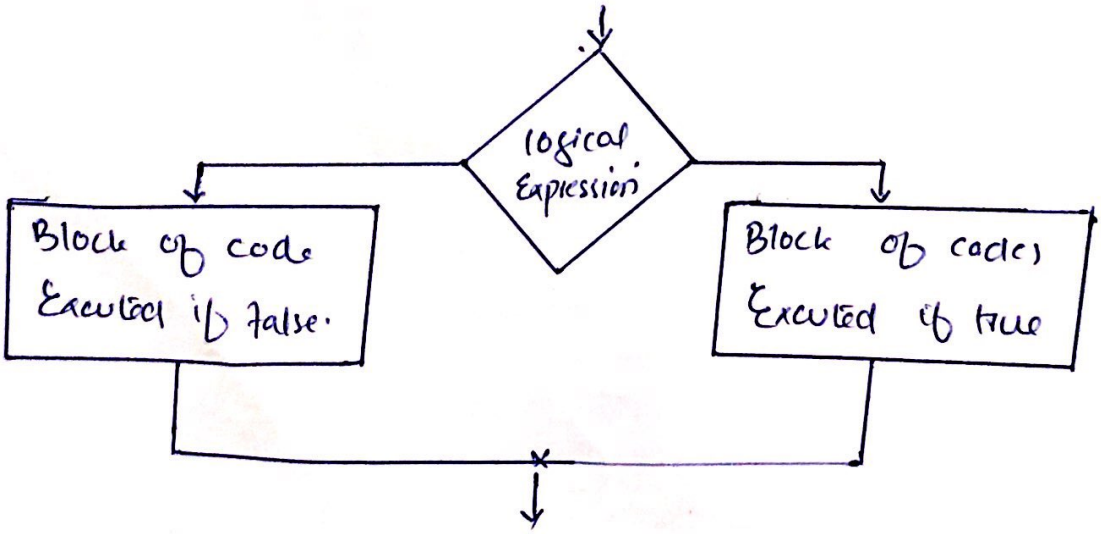
```
#include <iostream.h>
#include <conio.h>
main()
{
clrscr();
float radius, hight, volume;
cout<<"Enter radius=";
cin>>radius;
cout<<"Enter the height=";
cin>>height;
volum = 3.14*r*r*h;
cout<<"volume of the cylinder="<<volume;
getch;
}
```

QUESTION- 4-b

FLOW CHART FOR "IF STATEMENT."



FLOW CHART FOR "IF ELSE STATEMENT"



QUESTION- #5a"

SEQUENTIAL STATEMENT:.

Sequential statements are assigment statemant that assign values to variables and signals flow control system that conditionally exwtes statement (if and ease)

To familarise yourself with sequential statement consider the following

Assigment statement
Variable assigment statement
Signal assigmment statement
If satement
case statement
Loop statement
Next statement
Exit statement.

Q 5 - b

(9) (15)

```
# include < iostream . h >
# include < conio . h >
 main ( )
 {
 clr scr ( ) ;
 int a, b ;
 char operation

 Count << " Enter the first number, operator and
 then second number = " endl ;

 Cin >> a >> operation >> b ;

  Switch ( operation )
 {
  case '+' : ;

 Cout << " addition = " << ( a+b ) ;

   break ;
   case '-' :

 Coub << " Subtraction = " << ( a-b ) ;
   break ;
```

```
case '*';
cout << " multiplication = " << (a*b);
    break;
case '/';
cout << " Division = " << (a/b);
  default;
cout << " invalid input ";
  }
 getech ();
 }
```